

Baptiste Dugué

Paris, France · dugue@imj-prg.fr · [Website](#)

- » **Position:** PhD student at the [IMJ-PRG](#)
- » **Scientific interests:** Geodesic flow, Mixing, Hyperbolic geometry, Ergodic theory, Spectral theory, Heat kernels, Maths in general and sharing it with others
- » **Languages:** French, English, German (B1)
- » **Programming:** Python, SageMath, $\text{\LaTeX}$
- » **Other activities:** Cooking, Reading, Judo (brown belt), Climbing, ...

» » » PHD STUDIES

2025–... **Mixing of the geodesic flow in infinite volume**

- » PhD thesis co-supervised by [Adrien Boulanger](#), [Gilles Courtois](#) and [Antonin Guilloux](#) - [IMJ-PRG](#).

» » » EDUCATION

2024–2025 **Master 2 in Fundamental Mathematics – Aix-Marseille University, France** *cum laude*

- » Master thesis on mixing dynamical systems (cat map and geodesic flow on hyperbolic surfaces) supervised by [Adrien Boulanger](#).

2023–2024 **Master 2 Aggregation Preparation – ENS Rennes, University of Rennes, France**

- » Master thesis on holomorphic and meromorphic functions supervised by [B. Bekka](#).

Summer 2023 **Two-month research internship – University of Rennes, France**

- » Thesis – Introduction to braid groups supervised by [B. Wiest](#).

2022–2023 **Master 1 in Fundamental Mathematics – University of Rennes, France**

- » Master thesis on Stone spaces supervised by [B. Le Stum](#).

2020–2022 **Bachelor's degree in Mathematics – University of Rennes 1, France**

- » Fundamental mathematics track.

2018–2020 **Preparatory classes – Lycée Clemenceau, Nantes, France**

- » MPSI/MP track with computer science option.

2015–2018 **High school – Lycée Émile Combes, Pons, France**

- » French Baccalauréat in Engineering Sciences, Mathematics specialisation.
- » European section: English/Sport.
- » German (7 years).

» » » FUNDING

2025–2028 **PhD funding – CNRS**

2024–2025 **Master scholarship – Institut Archimède – Aix-Marseille University**

» One-year scholarship for the [Master 2 in Fundamental Mathematics](#) at Aix-Marseille University.

» » » TALKS

06/11/2026 **ACG Team Day – Paris, IMJ-PRG**

» Mélange du flot géodésique en volume infini

05/05/2026 **Wild Dynamics Working Group – Paris, IMJ-PRG**

» Équidistribution des sphères et mélange du flot géodésique

10/04/2026 **Saint-Charles PhD Seminar – Marseille, I2M**

» Du chat d'Arnold au mélange du flot géodésique

05/03/2026 **Spectral Measures Working Group – Paris, IMJ-PRG**

» Introduction – Flot géodésique et spectre du laplacien

05/02/2026 **Pampers Seminar (PhD students in Algebra/Geometry, Rennes)**

» Du chat d'Arnold au mélange du flot géodésique

13/11/2025 **Master's–PhD Students Meeting – Paris Jussieu**

» Hyperbolic surfaces, geodesic flow and strawberry banana smoothie

07/02/2025 **4A Day – ENS Rennes**

» Petits triangles, grands triangles

» » » CONFERENCES

01–05/06/2026 **Géométrie ergodique et groupes discrets dans des mondes irréguliers** CIRM, Marseille

23–24/04/2026 **Troisième rencontre ANR HilbertXField** IMJ-PRG, Jussieu, Paris

15–19/12/2025 **Géométrie et Dynamique à Aussois** Centre Paul Langevin, Aussois

24–26/11/2025 **Parole aux jeunes scientifiques du RT tétraèdre de Platon** Montpellier

22–25/09/2025 **Rencontre GALS** IHP, Paris

17–19/09/2025 **Groups, dynamics and surfaces in Paris** IMJ-PRG, Jussieu, Paris

02–06/06/2025 **Dynamique et géométrie en dimension 1, 2 et 3** CIRM, Marseille

» » » RESPONSIBILITIES

2026 **Organization of a [workshop on spectral measures](#)**

- » Nine talks from March to June 2026.

2026–... **Organization of the [IMJ-PRG PhD Students Seminar](#)**

» » » TEACHING AND OUTREACH

June–July 2026 **Supervision of a Bachelor research internship**

- » Supervision of Thomas Doucy and Maxime Etchegaray's voluntary research internship on group actions.
Proof of the simplicity of A_5 through the isomorphism $A_5 \simeq \mathrm{SL}_2(\mathbb{F}_4)$.

2025–2028 **Teaching assistant position at Sorbonne University**

192h

- » Tutorial classes for L3 students: [Algebraic Structures](#) – 2026 – 48h.
- » Tutorial classes for L2 students: [Linear Algebra 2](#) – 2026 – 54h.
- » Tutorials/practicals for L1 students: [Data Science](#) – 2025 – 38h.

31 March – 2 April 2025 **Hippocampe Programme – Marseille**

- » Supervision of middle school students during a [Hippocampe research project](#).

2024–2025 **Tutoring – Aix-Marseille University**

24h

- » Tutoring for third-year undergraduate students (Linear Algebra, Euclidean Geometry, Differential Calculus, Group Theory, Fourier Series, ...)

2024 **Agrégation**

2020–2023 **Private tutoring**

» » » OTHER ACTIVITIES

26/06/2025 **Literary Café of I2M – Marseille**

- » Recording of a [podcast](#) about the book *La formule de Stokes, roman* by Michèle Audin.